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Comments to FCC docket 03-104

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I fear that BPL and PLC systems that superimpose RF energy on open wires will radiate and interfere with existing licensed services. I believe that power lines are good transmission lines for 60HZ currents, but they are antennas for 2-80MHZ.

I do not have any ideas about how to develop lab systems for testing such radiation, but I wonder if the FCC has sent technicians to Japan, Austria, Belgium and other countries where such systems are being used to test the effects on HF reception. I watched a video made by a Japanese amateur operator. He was walking near apartment buildings with a handheld HF receiver tuned to a broadcast station on 6.055mhz. All you can hear is a hissing and screeching sound. Has the Current Technologies Company demonstration system in Potomac MD been tested for interference?

After the system is in place and you receive interference complaints, what can be done? The noise will be everywhere. On the lines running along the street, down into the house and right to the receiver through house wiring. It is not like you can wrap the power lines with aluminum foil to shield them. The lines can't be by passed with filters without also killing the data. Will you shut off the BPL service until the interference is resolved?

The Internet is a fragile, heavily connected infrastructure. It may be subject to outages such as cell phone jams or damage to telephone lines. I remember when this actually happened when a construction crew accidentally dug up the cable and shut down the entire North East.

Amateur Radio Operation and other licensed services are independent of this infrastructure. They relies on air and ground wave propagation. Historically, Radio Amateurs have been a valuable resource in times of emergency. The 9-11 disaster is a case in point. Today, through government grants, many of our members are taking the AREC emergency training to become more proficient and valued elements of the homeland security system. This resource, along with many other public safety oriented services should be protected from potential and likely radiation from PLC and BPL systems.

The NTIA objected to Radio Amateurs receiving a significant segment on the 60m band. They sited the needs of various homeland security services. To me, this seems to show a concern for the preservation of the efficient functioning of emergency airwave dependant services, yet they seem to be a driving force behind the implementation of BPL/PLC which will likely cause interference to these same services.

In closing, I urge the commission to investigate interference effects of PLC systems presently in operation. While I realize you are committed to not allowing unsubstantiated claims to stand in the way of BPL implementation. But what more proof do you need than to hear the effects for

yourself? I further recommend against allowing any system that applies radio frequency signals to power lines. Again this amounts to at radio transmitter being connected to an antenna. It will radiate! Once this system is instantiated, it will be very difficult to eliminate. We will be left with a Pandora's box of interference that will devastate communication services that depend on high frequency airwave propagation.